

**ABSTRACT**

An input system for compact devices such as cell phones and watches which includes alphanumeric and pointer capability, provides input rates similar to those of optimized-stylus-keyboard and thumbboard systems, and is one-hand operable and compatible with full-face displays. Input is by means of an “eyes-free” pointing device (which may be a touchpad with tactile markings, an isometric sensor or an array of discrete keys) which may be mounted on the back of the unit. An optionally-displayed menu of input options embodies a gestural code: the action needed to select a symbol on the menu is the required gesture – even when the menu is not shown. Cursor control is through an absolute positional function; this permits experienced users to type by touch, relying on kinesthetic cues. The user may maintain contact with the sensor during transits between selections, in which case visual feedback (in the form of a cursor, highlighting of indicated menu features, and / or a stroke trace) is provided - which enables pre-emptive correction of errors, and quick learning. The user indicates selection with a modulation of contact pressure. Two gestural lexicons are described. One uses pointing gestures and a flat menu, and is simpler; the other uses stroke gestures and a cellular menu, and is more space-efficient.